

Title (en)
INJECTION MOLDED SCREENING APPARATUSES AND METHODS

Title (de)
SPRITZGEGOSSENE SIEBVORRICHTUNGEN UND VERFAHREN

Title (fr)
APPAREILS ET PROCÉDÉS DE CRIBLAGE MOULÉS PAR INJECTION

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Application
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Abstract (en)

Screening members, screening assemblies, methods for fabricating screening members and assemblies and methods for screening materials are provided for vibratory screening machines that incorporate the use of injection molded materials. Use of injection molded screen elements provide, inter alia, for: varying screening surface configurations; fast and relatively simple screen assembly fabrication; and a combination of outstanding screen assembly mechanical and electrical properties, including toughness, wear and chemical resistance. Embodiments of the present invention use a thermoplastic injection molded material.

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Citation (applicant)

- US 4819809 A 19890411 - DERRICK JAMES W [US]
- US 61652039 P
- US 61714882 P
- US 7578394 B2 20090825 - WOJCIECHOWSKI KEITH [US], et al
- US 46020009 A 20090715
- US 5332101 A 19940726 - BAKULA JOHN J [US]
- US 6669027 B1 20031230 - MOONEY JAMES A [US], et al
- US 76304610 A 20100419
- US 5165808 A 20080319
- US 6431366 B2 20020813 - FALLON THOMAS M [US]
- US 6820748 B2 20041123 - FALLON THOMAS M [US]
- US 4882054 A 19891121 - DERRICK WILLIAM W [US], et al
- US 4857176 A 19890815 - DERRICK JAMES W [US], et al
- US 7228971 B2 20070612 - MOONEY JAMES A [US], et al

Citation (search report)

- [X] US 2013313168 A1 20131128 - WOJCIECHOWSKI KEITH F [US]
- [A] GB 2497873 A 20130626 - NAT OILWELL VARCO LP [US]

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DOCDB simple family (application)
US 201414268101 A 20140502; AP 2016009592 A 20150501; AR P150101308 A 20150430; AR P200101692 A 20200616; AR P200101693 A 20200616; AU 2015252993 A 20150501; AU 2018256563 A 20181031; AU 2020204620 A 20200710; AU 2020227097 A 20200904; BR 112016025640 A 20150501; BR 122020012127 A 20150501; BR 122020012131 A 20150501; BR 122020012134 A 20150501; CA 2947714 A 20150501; CA 3032704 A 20150501; CA 3032710 A 20150501; CA 3032719 A 20150501; CA 3109849 A 20150501; CN 201580022289 A 20150501; CN 201911077469 A 20150501; CN 202010100374 A 20150501; EA 201692228 A 20150501; EA 202190023 A 20150501; EP 15722851 A 20150501; EP 21157835 A 20150501; EP 21157842 A 20150501; MX 2016014309 A 20150501; MX 2020007922 A 20161031; MX 2020007923 A 20161031; US 2015028737 W 20150501;

US 201615201865 A 20160705; US 201715851099 A 20171221; US 201916359773 A 20190320; US 201916359830 A 20190320;
US 202117141062 A 20210104